

WHAT IS CLAIMED IS:

1. An antiviral polynucleotide ligand composition.
2. The polynucleotide ligand of Claim 1, wherein said ligand binds to a virus envelope.
3. The polynucleotide ligand of Claim 1, wherein said ligand binds to a virus capsid.
4. The polynucleotide ligand of Claim 1, wherein said ligand is an RNA polynucleotide.
5. The polynucleotide ligand of Claim 4, wherein said RNA is RNase resistant.
6. The polynucleotide ligand of Claim 5, wherein said RNA comprises 2-amino pyrimidines.
7. The polynucleotide ligand of Claim 1, wherein said polynucleotide binds to human cytomegalovirus and inhibits virus infection.
8. The polynucleotide ligand of Claim 7, wherein said polynucleotide comprises the sequence set forth in any of SEQ ID NO:1 to SEQ ID NO:28, or SEQ ID NO:36 to SEQ ID NO:41.
9. The polynucleotide ligand of Claim 8, wherein said ligand comprises the sequence set forth in SEQ ID NO:2.
10. The polynucleotide ligand of Claim 8, wherein said ligand comprises the sequence set forth in SEQ ID NO:12.
11. The polynucleotide ligand of Claim 8, wherein said ligand comprises the sequence set forth in SEQ ID NO:36.

12. The polynucleotide ligand composition of Claim 1, further comprising a pharmaceutically acceptable carrier.

5 13. The polynucleotide ligand composition of Claim 12, wherein said polynucleotide ligands comprises two or more distinct sequences.

14. The polynucleotide ligand composition of Claim 13, wherein said ligands comprising distinct sequences bind to different epitopes of the virus.

15. A method of treating viral infection, the method comprising:
administering a dose of an antiviral polynucleotide composition at a dose sufficient to decrease said viral infection.

15 16. The method of Claim 15, wherein said antiviral polynucleotide blocks viral entry into a cell.

17. The method of Claim 16, wherein said ligand is an RNA polynucleotide.

20 18. The method of Claim 17, wherein said RNA is RNase resistant.

19. The method of Claim 18, wherein said RNA comprises 2-amino pyrimidine nucleotides.

25 20. The method of Claim 15, wherein said virus is human cytomegalovirus.

21. The method of Claim 15, wherein said polynucleotide comprises the sequence set forth in any of SEQ ID NO:1 to SEQ ID NO:28, or SEQ ID NO:36 to SEQ ID NO:41.

30 22. The method of Claim 20, wherein said ligand comprises the sequence set forth in SEQ ID NO:2.

23. The method of Claim 20, wherein said ligand comprises the sequence set forth in SEQ ID NO:12.

24. The method of Claim 20, wherein said ligand comprises the sequence set forth in SEQ ID NO:36.

25. The method of Claim 15, wherein said polynucleotide ligands comprises two or more distinct sequences.

26. The method of Claim 23, wherein said ligands comprising distinct sequences bind to different epitopes of the virus.

27. A method of selecting a polynucleotide ligand having antiviral activity, the method comprising:

- (a) contacting a viral target with a pool of randomized polynucleotides;
- (b) partitioning polynucleotides bound to said viral target from unbound polynucleotides;
- (c) amplifying said polynucleotides bound to said viral target;
- (d) repeating steps (a) to (c).

28. The method according to Claim 27, wherein said viral target is an intact infectious virus.

29. The method of Claim 27, wherein said partitioning comprising the steps of contacting said polynucleotides with a porous filter.

30. The method of Claim 29, wherein said porous filter has a pore size of from 10 to 100 nm.

31. The method of Claim 30, wherein said pore size is about 50 nm.

32. The method of Claim 27, further comprising treating said polynucleotides bound to said viral target with a protease following said partitioning step.

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